## IN THE CLAIMS

Kindly replace the prior claims listing by the following listing:

1-30. (cancelled)

## 31. (currently amended): A metal complex compound of formula (1a)

$$[L_n Me_m X_p]^z Y_q$$
 (1a),

wherein Me is manganese which is present in oxidation state II, III, IV or V, or iron which is present in oxidation state II, III or IV,

X is a coordinating or bridging radical,

n and m are each independently of the other an integer having a value of from 1 to 8, p is an integer having a value from 0 to 32,

z is the charge of the metal complex,

Y is a counter-ion,

q = z/(charge Y), and

ligand L is a compound of formula (3)

$$R'_{3} \xrightarrow{A_{N}} R'_{6}$$

$$R'_{9}$$

$$(3),$$

wherein

R'<sub>6</sub> is cyano; halogen; nitro; -COOR<sub>12</sub> or -SO<sub>3</sub>R<sub>12</sub>; -SR<sub>13</sub>, -SO<sub>2</sub>R<sub>13</sub> or -OR<sub>13</sub>; -NR<sub>14</sub>R<sub>15</sub>; -N(R<sub>13</sub>)-(CH<sub>2</sub>)<sub>1-6</sub>-N<sup> $\oplus$ </sup>R<sub>14</sub>R<sub>15</sub>R<sub>16</sub>;

-N(R<sub>13</sub>)-N-R<sub>14</sub> $\ddot{R}_{15}$  or -N(R<sub>13</sub>)-N<sup> $\oplus$ </sup>R<sub>14</sub>R<sub>15</sub>R<sub>16</sub>, wherein

 $R_{12}$  is in each case hydrogen, a cation,  $C_1$ - $C_{12}$ alkyl, or phenyl unsubstituted or substituted by  $C_1$ - $C_4$ alkyl,  $C_1$ - $C_4$ alkoxy, halogen, cyano, nitro, carboxyl, sulfo, hydroxyl, amino, N-mono- or N,N-di- $C_1$ - $C_4$ alkylamino unsubstituted or substituted by hydroxy in the alkyl moiety, N-phenylamino, N-naphthylamino, where the amino groups may be quaternized, phenyl, phenoxy or by naphthoxy;

R<sub>13</sub> is in each case hydrogen, C<sub>1</sub>-C<sub>12</sub>alkyl, or phenyl unsubstituted or substituted as indicated above;

and  $R_{14}$ ,  $R_{15}$  and  $R_{16}$  are each independently of the other(s) hydrogen, unsubstituted or hydroxylsubstituted  $C_1$ - $C_{12}$ alkyl, or phenyl unsubstituted or substituted as indicated above, or  $R_{14}$  and  $R_{15}$ together with the nitrogen atom bonding them form a pyrrolidine, piperidine, morpholine or azepane ring which is unsubstituted or substituted by at least one unsubstituted  $C_1$ - $C_4$ alkyl and/or substituted  $C_1$ - $C_4$ alkyl, wherein the nitrogen atom can be quaternized; or a radical

$$-\;({\rm CH_2})_{\overline{\rm 0-4}}{\rm N} {\rm N} {\rm R_{16}}$$

wherein R<sub>15</sub> and R<sub>16</sub> are as defined above and the ring may be substituted; and R'<sub>3</sub> and R'<sub>9</sub> are as defined above for R'<sub>6</sub> or are hydrogen, C<sub>1</sub>-C<sub>12</sub>alkyl, or phenyl unsubstituted or substituted as indicated above,

with the proviso that

- (i) at least one of the substituents R<sub>3</sub>', R<sub>6</sub>' and R<sub>9</sub>' contains a quaternized nitrogen atom which is not directly bonded to one of the three pyridine rings A, B or C and that
- (ii) with the proviso that when the ligand L is 1,1-dimethyl-4-[2,2';6',2"]terpyridin-4'-yl-piperazin-1-ium

## the metal Me is not Mn and the counter-ion Y is not Cl or l

Y is neither I nor Cl in the case that Me is Mn, R3 and R6 are hydrogen and R6 is

32-42. (cancelled).

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- 43. (previously presented): A washing, cleaning, disinfecting or bleaching agent, comprising
  - 1) 0 50 % A) of an anionic surfactant and/or B) of a non-ionic surfactant,
  - II) 0 70 % C) of a builder substance,
  - III) 1 99 % D) of a peroxide, and
  - IV) E) a metal complex compound of formula (1a) as described in claim 46 in an amount which, in the liquor, gives a concentration of 0.5 50 mg/litre of liquor when from 0.5 to 20 g/litre of the washing, cleaning, disinfecting and bleaching agent are added to the liquor,

the percentages in each case being percentages by weight, based on the total weight of the agent.

## 44-45 (cancelled).

46. (currently amended): A method of catalyzing an oxidation reaction which comprises oxidizing a substrate in the presence of a catalytically effective amount of a metal complex compound of formula (1a)

$$[L_n Me_m X_p]^z Y_q$$
 (1a),

wherein Me is manganese which is present in oxidation state II, III, IV or V, or, iron which is present in oxidation state II, III or IV,

X is a coordinating or bridging radical,

n and m are each independently of the other an integer having a value of from 1 to 8, p is an integer having a value of from 0 to 32,

z is the charge of the metal complex,

Y is a counter-ion,

q = z/(charge Y), and

ligand L is a compound of formula (3)

$$R'_3 \xrightarrow{A}_N \xrightarrow{R'_6} R'_9$$

$$(3),$$

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3C 0

wherein

R'<sub>6</sub> is cyano; halogen; nitro; -COOR<sub>12</sub> or -SO<sub>3</sub>R<sub>12</sub>; -SR<sub>13</sub>, -SO<sub>2</sub>R<sub>13</sub> or -OR<sub>13</sub>; -NR<sub>14</sub>R<sub>15</sub>;-N(R<sub>13</sub>)-(CH<sub>2</sub>)<sub>1-6</sub>NR<sub>14</sub>R<sub>15</sub>; -N(R<sub>13</sub>)-(CH<sub>2</sub>)<sub>1-6</sub>-N<sup> $\oplus$ </sup>R<sub>14</sub>R<sub>15</sub>R<sub>16</sub>;

 $-N(R_{13})-N-R_{14}R_{15}$  or  $-N(R_{13})-N^{\oplus}R_{14}R_{15}R_{16}$ , wherein

 $R_{12}$  is in each case hydrogen, a cation,  $C_1$ - $C_{12}$ alkyl, or phenyl unsubstituted or substituted by  $C_1$ - $C_4$ alkyl,  $C_1$ - $C_4$ alkoxy, halogen, cyano, nitro, carboxyl, sulfo, hydroxyl, amino, N-mono- or N,N-di- $C_1$ - $C_4$ alkylamino unsubstituted or substituted by hydroxy in the alkyl moiety, N-phenylamino, N-naphthylamino, where the amino groups may be quaternized, phenyl, phenoxy or by naphthoxy;

R<sub>13</sub> is in each case hydrogen, C<sub>1</sub>-C<sub>12</sub>alkyl, or phenyl unsubstituted or substituted as indicated above:

and R<sub>14</sub>, R<sub>15</sub> and R<sub>16</sub> are each independently of the other(s) hydrogen, unsubstituted or hydroxyl-substituted C<sub>1</sub>-C<sub>12</sub>alkyl, or phenyl unsubstituted or substituted as indicated above, or R<sub>14</sub> and R<sub>15</sub> together with the nitrogen atom bonding them form a pyrrolidine, piperidine, morpholine or azepane ring which is unsubstituted or substituted by at least one unsubstituted C<sub>1</sub>-C<sub>4</sub>alkyl and/or substituted C<sub>1</sub>-C<sub>4</sub>alkyl, wherein the nitrogen atom can be quaternized;

$$-(CH_2)_{\overline{0.4}}N$$
 $R_{16}$ 

wherein R<sub>15</sub> and R<sub>16</sub> are as defined above and the ring may be substituted; and R'<sub>3</sub> and R'<sub>9</sub> are as defined above for R'<sub>6</sub> or are hydrogen, C<sub>1</sub>-C<sub>12</sub>alkyl, or phenyl unsubstituted or substituted as indicated above,

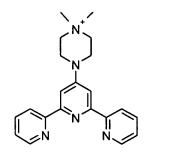
with the proviso that

(i) at least one of the substituents R<sub>3</sub>', R<sub>6</sub>' and R<sub>9</sub>' contains a quaternized nitrogen atom which is not directly bonded to one of the three pyridine rings A, B or C and that

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(ii) with the proviso that when the ligand L is 1,1-dimethyl-4-[2,2';6',2"]terpyridin-4'-yl-piperazin-1-ium

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the metal Me is not Mn and the counter-ion Y is not Cl or l

Y is neither I nor CI in the case that Me is Mn(II), R3' and R6' are hydrogen and R6' is

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47-48. (cancelled).

- 49. (previously presented): A method according to claim 46, wherein X is CH<sub>3</sub>CN, H<sub>2</sub>O, F<sup>-</sup>, Cl<sup>-</sup>, Br<sup>-</sup>, HOO<sup>-</sup>, O<sub>2</sub><sup>2-</sup>, O<sup>2-</sup>, R<sub>17</sub>COO<sup>-</sup>, R<sub>17</sub>O<sup>-</sup>, LMeO<sup>-</sup> or LMeOO<sup>-</sup> wherein R<sub>17</sub> is hydrogen, -SO<sub>3</sub>C<sub>1</sub>-C<sub>4</sub>alkyl, or unsubstituted or substituted C<sub>1</sub>-C<sub>18</sub>alkyl or aryl, and L and Me are as defined in claim 46.
- 50. (previously presented): A method according to claim 46, wherein Y is R<sub>17</sub>COO<sup>-</sup>, ClO<sub>4</sub><sup>-</sup>, BF<sub>4</sub><sup>-</sup>, PF<sub>6</sub><sup>-</sup>, R<sub>17</sub>SO<sub>3</sub><sup>-</sup>, R<sub>17</sub>SO<sub>4</sub><sup>-</sup>, SO<sub>4</sub><sup>2</sup>-, NO<sub>3</sub><sup>-</sup>, F<sup>-</sup>, Cl<sup>-</sup>, Br<sup>-</sup>, l<sup>-</sup>, citrate, tartrate or oxalate, wherein R<sub>17</sub> is hydrogen or unsubstituted or substituted C<sub>1</sub>-C<sub>18</sub>alkyl or aryl.
- 51. (previously presented): A method according to claim 46, wherein n is an integer having a value of from 1 to 4.
- 52. (previously presented): A method according to claim 46, wherein m is an integer having a value of 1 or 2.
- 53. (previously presented): A method according to claim 46, wherein p is an integer having a value of from 0 to 4.

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54. (previously presented): A method according to claim 46, wherein z is an integer having a value of from 8- to 8+.

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58. (previously presented): A method according to claim 46, wherein R<sub>6</sub>' is

$$-N = N + CH_{2}CH_{2}OH + N + CH_{3} + CH_{2}CH_{2}OH + CH_{2}CH_{2}OH + CH_{2}CH_{2}OH + CH_{2}CH_{2}OH + CH_{2}CH_{2}OH + CH_{2}CH_{2}OH + CH_{3} + CH_{2}CH_{2}OH + CH_{3}OH + CH_{3}O$$

 $R_3$ ' and  $R_9$ ' are as defined above for  $R_6$ ' or are hydrogen.

59. (cancelled).

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60. (previously presented): A method according to claim 46, wherein

 $R'_3$ ,  $R'_6$  and  $R'_9$  are each independently of the others phenyl unsubstituted or substituted by  $C_1$ - $C_4$ alkyl,  $C_1$ - $C_4$ alkoxy, halogen, phenyl or hydroxyl; cyano; nitro; -COOR $_{12}$  or -SO $_3$ R $_{12}$ , wherein  $R_{12}$  is in each case hydrogen, a cation,  $C_1$ - $C_4$ alkyl or phenyl; -SR $_{13}$ , -SO $_2$ R $_{13}$  or -OR $_{13}$  wherein  $R_{13}$  is in each case hydrogen,  $C_1$ - $C_4$ alkyl or phenyl, -N( $CH_3$ )-NH $_2$  or -NH-NH $_2$ ; amino; N-mono- or N,N-di- $C_1$ - $C_4$ alkylamino unsubstituted or substituted by hydroxy in the alkyl moiety, wherein the nitrogen atoms which are not bonded to one of the three pyridine rings A, B or C, may be quaternized; N-mono- or N,N-di- $C_1$ - $C_4$ alkyl-N $^0$ R $_{14}$ R $_{15}$ R $_{16}$ , unsubstituted or substituted by hydroxy in the alkyl moiety, wherein  $R_{14}$ ,  $R_{15}$  and  $R_{16}$  are each independently of the others hydrogen, unsubstituted or hydroxyl-substituted  $C_1$ - $C_1$ 2alkyl, or phenyl unsubstituted or substituted as indicated above, or  $R_{14}$  and  $R_{15}$  together with the nitrogen atom bonding them form a pyrrolidine, piperidine, morpholine or azepane ring unsubstituted or substituted by at least one  $C_1$ - $C_4$ alkyl or by at least one unsubstituted  $C_1$ - $C_4$ alkyl and/or substituted  $C_1$ - $C_4$ alkyl wherein the nitrogen atom can be quaternized; N-mono- or N,N-di- $C_1$ - $C_4$ alkyl-NR $_{14}$ R $_{15}$  unsubstituted or substituted by

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hydroxy in the alkyl moiety, wherein  $R_{14}$  and  $R_{15}$  can have the meanings indicated above; or a radical

$$-(CH_2)_{0.4}N$$
 $N$ 
 $R_{16}$ 

wherein  $R_{15}$  and  $R_{16}$  have the meanings indicated above, and the ring may be substituted, where  $R'_{3}$  and  $R'_{9}$  can likewise be hydrogen.

- 61. (previously presented): A method according to claim 46, wherein R<sub>6</sub>' is hydroxy.
- 62. (cancelled).
- 63. (previously presented): A method according to claim 46, wherein at least one of the substituents R'<sub>3</sub>, R'<sub>6</sub> and R'<sub>9</sub> is one of the radicals -(C<sub>1</sub>-C<sub>6</sub>alkylene)-N<sup>®</sup>R<sub>14</sub>R<sub>15</sub>R<sub>16</sub>; -N(R<sub>13</sub>)-(C<sub>1</sub>-C<sub>6</sub>alkylene)-N<sup>®</sup>R<sub>14</sub>R<sub>15</sub>R<sub>16</sub>;
  - -N[(C<sub>1</sub>-C<sub>6</sub>alkylene)-N<sup>®</sup>R<sub>14</sub>R<sub>15</sub>R<sub>16</sub>]<sub>2</sub>; or -N(R<sub>13</sub>)-N<sup>®</sup>R<sub>14</sub>R<sub>15</sub>R<sub>16</sub>, wherein R<sub>13</sub> is in each case hydrogen, C<sub>1</sub>-C<sub>4</sub>alkyl or phenyl and R<sub>14</sub>, R<sub>15</sub> and R<sub>16</sub> are each independently of the others hydrogen or substituted or unsubstituted C<sub>1</sub>-C<sub>18</sub>alkyl or aryl, or R<sub>14</sub> and R<sub>15</sub> together with the nitrogen atom bonding them form a substituted or unsubstituted 5-, 6- or 7-membered ring which may contain further heteroatoms; or -NR<sub>14</sub>R<sub>15</sub>; -(C<sub>1</sub>-C<sub>6</sub>alkylene)-NR<sub>14</sub>R<sub>15</sub>; -N(R<sub>13</sub>)-(C<sub>1</sub>-C<sub>6</sub>alkylene)-NR<sub>14</sub>R<sub>15</sub>; or -N(R<sub>13</sub>)-N-R<sub>14</sub>R<sub>15</sub>, wherein R<sub>13</sub> and R<sub>16</sub> are as defined above and R<sub>14</sub> and R<sub>15</sub> together with the nitrogen atom bonding them form a 5-, 6- or 7-membered ring which is unsubstituted or substituted by at least one unsubstituted C<sub>1</sub>-C<sub>4</sub>alkyl and/or substituted C<sub>1</sub>-C<sub>4</sub>alkyl and may contain further heteroatoms, wherein at least one nitrogen atom which is not bonded to one of the pyridine rings A, B or C is quaternized.
- 64. (previously presented): A method according to claim 46, wherein at least one of the substituents R'<sub>3</sub>, R'<sub>6</sub> and R'<sub>9</sub> is one of the radicals -(C<sub>1</sub>-C<sub>4</sub>alkylene)-N<sup>®</sup>R<sub>14</sub>R<sub>15</sub>R<sub>16</sub>; -N(R<sub>13</sub>)-(C<sub>1</sub>-C<sub>6</sub>alkylene)-N<sup>®</sup>R<sub>14</sub>R<sub>15</sub>R<sub>16</sub>;
  - $-N[(C_1-C_6alkylene)-N^{\oplus}R_{14}R_{15}R_{16}]_2$ ; or  $-N(R_{13})-N^{\oplus}R_{14}R_{15}R_{16}$ , wherein  $R_{13}$  is as defined in claim 46 and  $R_{14}$ ,  $R_{15}$  and  $R_{16}$  are each independently of the others hydrogen or substituted or unsubstituted  $C_1-C_{12}alkyl$  or aryl, or  $R_{14}$  and  $R_{15}$  together with the nitrogen atom bonding them form a 5-, 6- or 7-membered ring which may be unsubstituted or substituted by at least one

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yi¦⊹ ⊧aton unsubstituted  $C_1$ - $C_4$ alkyl and/or substituted  $C_1$ - $C_4$ alkyl and may contain further heteroatoms; or -NR<sub>14</sub>R<sub>15</sub>; -(C<sub>1</sub>-C<sub>6</sub>alkylene)-NR<sub>14</sub>R<sub>15</sub>; -N(R<sub>13</sub>)-(C<sub>1</sub>-C<sub>6</sub>alkylene)-NR<sub>14</sub>R<sub>15</sub>;

- -N[(C<sub>1</sub>-C<sub>6</sub>alkylene)-NR<sub>14</sub>R<sub>15</sub>]<sub>2</sub>; or -N(R<sub>13</sub>)-N-R<sub>14</sub>R<sub>15</sub>, wherein R<sub>13</sub> and R<sub>16</sub> are as defined above and R<sub>14</sub> and R<sub>15</sub> together with the nitrogen atom bonding them form a substituted or unsubstituted 5-, 6- or 7-membered ring which may contain further heteroatoms, wherein the nitrogen atom which is not bonded to one of the pyridine rings A, B or C is quaternized.
- 65. (previously presented): A method according to claim 64, wherein at least one of the substituents R'<sub>3</sub>, R'<sub>6</sub> and R'<sub>9</sub> is one of the radicals

$$-C_{1}\text{-}C_{4}\text{alkylene} - N \\ N \\ C_{1}\text{-}C_{4}\text{alkyl} \\ C_{1}\text{-}C_{4}\text{alkyl} \\ C_{1}\text{-}C_{4}\text{alkyl} \\ C_{1}\text{-}C_{4}\text{alkyl} \\ C_{1}\text{-}C_{4}\text{alkyl} \\ C_{2}\text{-}C_{4}\text{alkyl} \\ C_{3}\text{-}C_{4}\text{alkyl} \\ C_{4}\text{-}C_{4}\text{-}C_{4}\text{alkyl} \\ C_{5}\text{-}C_{5}\text{$$

wherein the alkylene group is unbranched or branched and may be substituted, and wherein the alkyl groups are independently unbranched or branched and may be substituted and wherein the piperazine ring may be substituted.

- 66. (previously presented): A method according to claim 46, wherein a metal complex compound of formula (1a) is used in a washing, cleaning, disinfecting or bleaching agent.
- 67. (previously presented): A method according to claim 66, wherein a metal complex compound of formula (1a) is formed *in situ* in the washing, cleaning, disinfecting or bleaching agent.
- 68. (previously presented): A method according to claim 46, wherein a metal complex compound of formula (1a) is used together with a peroxy compound for the bleaching of spots or stains on textile material or for the prevention of the redeposition of migrating dyes in the context of a washing process or for the cleaning of hard surfaces.
- 69. (previously presented): A method according to claim 46, wherein a metal complex compound of formula (1a) is used as a catalyst for reactions with a peroxy compound for bleaching in the context of paper-making.
- 70. (previously presented): A method according to claim 46, wherein a metal complex compound of formula (1a) is used as a catalyst for wastewater treatment.

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- 71 (previously presented): A method according to claim 46, wherein a metal complex compound of formula (1a) is used as a catalyst for the deliginification of cellulose.
- 72. (previously presented): A method according to claim 46, wherein mixtures of manganese complexes of the formula (1a) with iron complexes of the formula (1a) are used for preventing the redeposition of migrating dyes and at the same time bleaching of spots or stains on textile material.
- 73. (previously presented): A method according to claim 46, wherein mixtures of manganese complexes of the formula (1a) with iron complexes of the formula (1'), which corresponds to the formula (1a) but contains no quaternized nitrogen atoms, are used.

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